Amendments to the Claims

1. (Original) A method for regenerating a catalyst, comprising taking a catalyst-containing component containing a solid catalyst component deteriorated in a reaction, out of a fixed-bed reactor, and regenerating a solid catalyst component.

2. (Original) The method for regenerating the catalyst as set forth in Claim 1, wherein the catalyst-containing component comprises a component substantially inert to the reaction and, said taking-out step is followed by an inert component separation step for separating the component substantially inert to the reaction.

3. (Original) The method for regenerating the catalyst as set forth in Claim 2, wherein grains having a minor diameter different from that of the solid catalyst component are used as the component substantially inert to the reaction and in the inert component separation step, sieving is performed by use of a screen having rectangular openings of length a × length b which satisfies the following conditions (1) to (3):

(1) $a < b$;

(2) a is larger than a minor axis of a grain having a small minor axis and smaller than a minor axis of a grain having a large minor axis; and

(3) b is larger than a major axis of a grain having a small minor axis.

4. (Original) The method for regenerating the catalyst as set forth in Claim 2, wherein the inert component separation step is a step for performing separation by utilizing a difference in ease of rolling caused by a difference in sphericity between the solid catalyst component and the component substantially inert to the reaction.

5. (Original) The method for regenerating the catalyst as set forth in Claim 2, wherein the inert component separation step is a step for performing separation by utilizing a difference in ease of crushing caused by a difference in falling strength between the solid catalyst component and the component substantially inert to the reaction.

6. (Currently amended) The method for regenerating the catalyst as set forth in Claim 1 ~~or 2~~, wherein the solid catalyst component comprises a plurality of components having different shapes from one another and, said taking-out step is followed by catalyst component separation step for separating such solid catalyst components from one another.

7. (Original) The method for regenerating the catalyst as set forth in Claim 6, wherein the catalyst component separation step is a step of performing sieving by use of a screen having rectangular openings of length a × length b which satisfies the following conditions (1) to (3):

(1) $a < b$;

(2) a is larger than a minor axis of a grain having a small minor axis and smaller than a minor axis of a grain having a large minor axis; and

(3) b is larger than a major axis of a grain having a small minor axis.

8. (Original) The method for regenerating the catalyst as set forth in Claim 6, wherein said catalyst component separation step is a step in which separation is performed by utilizing a difference in ease of rolling caused by a difference in sphericity.

9. (Original) The method for regenerating the catalyst as set forth in Claim 6, wherein said catalyst component separation step is a step in which separation is performed by utilizing a difference in ease of crushing caused by a difference in falling strength.

10. (Currently amended) The method for regenerating the catalyst as set forth in ~~any of Claims 1 to 9~~ Claim 1, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

11. (Currently amended) The method for regenerating the catalyst as set forth in ~~any of Claims 1 to 9~~ Claim 1, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

12. (New) The method for regenerating the catalyst as set forth in Claim 2, wherein the solid catalyst component comprises a plurality of components having different shapes from one another and, said taking-out step is followed by catalyst component separation step for separating such solid catalyst components from one another.

13. (New) The method for regenerating the catalyst as set forth in Claim 2, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

14. (New) The method for regenerating the catalyst as set forth in Claim 3, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

15. (New) The method for regenerating the catalyst as set forth in Claim 4, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

16. (New) The method for regenerating the catalyst as set forth in Claim 5, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

17. (New) The method for regenerating the catalyst as set forth in Claim 6, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

18. (New) The method for regenerating the catalyst as set forth in Claim 7, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

19. (New) The method for regenerating the catalyst as set forth in Claim 8, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

20. (New) The method for regenerating the catalyst as set forth in Claim 9, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum, bismuth and iron, which is used in a process for subjecting propylene, isobutylene or tertiary-butanol to a catalytic vapor-phase oxidation reaction to produce a corresponding unsaturated aldehyde.

21. (New) The method for regenerating the catalyst as set forth in Claim 2, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

22. (New) The method for regenerating the catalyst as set forth in Claim 3, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

23. (New) The method for regenerating the catalyst as set forth in Claim 4, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

24. (New) The method for regenerating the catalyst as set forth in Claim 5, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

25. (New) The method for regenerating the catalyst as set forth in Claim 6, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

26. (New) The method for regenerating the catalyst as set forth in Claim 7, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

27. (New) The method for regenerating the catalyst as set forth in Claim 8, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.

28. (New) The method for regenerating the catalyst as set forth in Claim 9, wherein said solid catalyst component is a compound oxide catalyst comprising, as main components, molybdenum and vanadium, which is used in a process for subjecting an unsaturated aldehyde to a catalytic vapor-phase oxidation reaction to produce an unsaturated carboxylic acid.